# A Battle for Hearts and Minds: New Zealand's Legal Response to Work-Stress-Related Depression and Cardiovascular Disease

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## Abstract

As patterns of work change, so do the resulting patterns of work-related ill health. While medical thinking on stress-related illnesses has shifted enormously in the past decades, the law has not. This paper will explore New Zealand's legal response to work-stress-related illnesses, especially depression and cardiovascular disease. It will outline the current interaction of the Health and Safety at Work Act 2015, the Accident Compensation Act 2001 and the personal grievances regime in cases of work-related depression and cardiovascular disease, and highlight key areas of reform needed. The law, as it stands, is failing to provide either adequate protection from, or compensation for work-stress-related illness. With heart disease as New Zealand's leading cause of death, and rates of mental illness on the rise, addressing the more complex relationships between work and health becomes an urgent task for the future of New Zealand labour law.

## I. Introduction

Depression and cardiovascular disease are two of the most significant health issues affecting working people in New Zealand and globally. Cardiovascular disease is ranked by the New Zealand Ministry of Health as the leading cause of death in New Zealand[1] and by the World Health Organization (WHO) as the leading cause of death worldwide.[2] Depression is also a growing cause of incapacity and death in New Zealand, with suicide being the second leading cause of death for non-Māori males and the third leading cause of death for Māori males.[3] Internationally, depression is expected to become the second leading cause of worldwide disability by 2030.[4]

While reliable statistics on work-related cardiovascular disease and depression are not available in New Zealand for reasons explained further below, local and international research indicates that work-stress is a significant factor in the development of, and rates of death from, these diseases, warranting intervention. This paper argues that labour law has a crucial role to play in addressing

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[1] Ischemic heart disease is the leading cause of death for Maori and non-Maori males and non-Maori females, and second leading cause of death for Maori females, but top overall in the New Zealand population. Statistics available on the New Zealand Ministry of Health website at: http://www.health.govt.nz/our-work/populations/maori-health/tatau-kahukura-maori-health-statistics/nga-mana-hauora-tutohu-health-status-indicators/major-causes-death

[2] World Health Organisation *Cardiovascular Diseases Factsheet* (May 2017) available at: http://www.who.int/mediacentre/factsheets/fs317/en/

[3] Statistics available on the New Zealand Ministry of Health website at: http://www.health.govt.nz/our-work/populations/maori-health/tatau-kahukura-maori-health-statistics/nga-mana-hauora-tutohu-health-status-indicators/major-causes-death

[4] C Mathers and D Loncar "Projections of global mortality and burden of disease from 2002 to 2030" (2006) *PLoS Medicine* 3 11, e442.

the problems of work-stress-related depression and cardiovascular disease. This paper explores the gap between current medical thinking on these conditions and the law. New Zealand's legal response to work-stress-related depression and cardiovascular disease is contained in the Accident Compensation Act 2001(ACA), the Health and Safety at Work Act 2015 (HSWA), the sick leave provisions of the Holidays Act 2003 (HA) and the wider regulation of work in the Employment Relations Act 2000 (ERA), particularly the personal grievances regime. This paper outlines key areas of reform needed to better address work-related depression and cardiovascular disease.

## II. The Science, the Law, and the Gaps in Between

The increasing prevalence and economic impact of cardiovascular disease and depression has resulted in a substantial body of research on the causal connection between stressful environments (both work and non-work) and the development of disease. With the mapping of the human genome, the invention of fMRI machines, epigenetic research (allowing for a better understanding the interaction of genes and environment) and the rise of big data, medical thinking has shifted enormously since the mid-20th century. The law, however, has not.

The New Zealand ACC Scheme, for example, was based on the 1967 *Report of the Royal Commission of Inquiry in to Compensation for Personal Injury in New Zealand*, chaired by the then Justice Woodhouse (Woodhouse Report).[5] The scheme was introduced in 1972, adopting the work-related disease coverage provisions from the previous Workers' Compensation Act 1956, which were much the same as in the previous 1934 Act. Despite reforms to restrict the costs of the scheme in the 1990s, and again in 2010, the work-related health cover provisions have not been substantially updated,[6] lagging behind other jurisdictions and medical thinking. Likewise, despite recent reforms to New Zealand's health and safety laws, the HSWA remains very much Robens model legislation, meaning its structure and enforcement machinery are based on the *Report of the British Parliamentary Committee on Safety and Health and Work*, in 1972.[7] The HSWA continues to reflect many of the assumptions and biases of the Robens model and remains primarily designed for work as it was performed in the factories and mines of the mid-20th century.[8]

[5] Royal Commission of Inquiry into Compensation for Personal Injury in New Zealand *Compensation for Personal Injury in New Zealand: Report of the Royal Commission of Inquiry* (Government Printer, Wellington, 1967).

[6] Compare reformulation in Accident Compensation Act 1982, s 28 "disease due to nature of employment." The Accident Compensation, Rehabilitation and Insurance Act 1992 further amended and reformulated the test for "personal injury caused by gradual process, disease or infection arising out of or in the course of employment" in s 7. Section 30 was most recently amended by the Accident Compensation Amendment Act 2010.

[7] Alfred Robens (Chair) *Report of the Committee on Safety and Health at Work* (HMSO, London, 1972).

[8] See the critique of the Robens model and its assumptions in Theo Nichols *The Sociology of Industrial Injury* (Mansell Publishing, London, 1997) at 2-3; Philip Bohle "Work Psychology and the Management of Occupational Health and Safety: An Overview" in Michael Quinlan (ed) *Work and Health: The Origins, Management and Regulation of Occupational Illness* (Macmillan, Melbourne, 1993); William Breen Creighton, William Ford and Richard Mitchell *Labour Law: Text and Materials* (2nd ed, Law Book Co, Sydney, 1993) at 1340; Harry Glasbeek "Occupational Health and Safety Law: Criminal Law as a Political Tool" (1998) 11 AJLL 95 at 99.

*a. Changes in medical thinking on stress-related conditions*

While this paper does not aim to provide a proper review of the relevant medical literature, it is useful to start with a brief overview of current thinking on 'stress' and its causal connection to disease. Stress is not itself a disease, but an adaptive response of the body to a demand. In contrast to how it is frequently described in human resources literature, "stress is not a subjective feeling. It is a measurable set of physiological events in the body."[9] The stress response begins in the brain, with the amygdala, the area of the brain that contributes to emotional processing, interpreting a person's experiences. When someone experiences a stressful event the amygdala sends a distress signal to the hypothalamus, communicating with the rest of the body through the autonomic nervous system.[10] The nervous system controls involuntary body functions such as breathing, blood pressure, heartbeat, and the dilation or constriction of key blood vessels and the small airways in the lungs. It is divided into two parts, the sympathetic and parasympathetic nervous system. The sympathetic nervous system operates in response to (or what our body perceives to be) an emergency, activating the commonly called 'fight or flight response,' releasing adrenaline and the related hormone noradrenaline.[11] As Sapolsky explains:[12]

> The autonomic system works in opposition: sympathetic and parasympathetic projections from the brain course there way out to a particular organ where, when activated, they bring about opposite results. The sympathetic system speeds up the heart, the parasympathetic system slows it down. The sympathetic system diverts blood flow to your muscles; the parasympathetic does the opposite.

Put simply, this can be understood as:[13]

> [T]he sympathetic nervous system functions like a gas pedal in a car. It triggers the fight-or-flight response, providing the body with a burst of energy so that it can respond to perceived dangers. The parasympathetic nervous system acts like a brake. It promotes the "rest and digest" response that calms the body down after the danger has passed.

As adrenaline circulates through the body, it brings on the physiological changes which we typically experience when stressed. The heart beats faster, pushing blood to the muscles, heart, and other vital organs. Pulse rate and blood pressure go up. The person undergoing these changes also starts to breathe more rapidly and small airways in the lungs open wide so lungs can take in as much oxygen as possible. Extra oxygen is sent to the brain, increasing alertness. Sight, hearing, and other senses become sharper. Meanwhile, adrenaline triggers the release of blood sugar and fats from temporary storage sites in the body. These nutrients flood into the bloodstream, supplying energy to all parts of the body.[14]

[9] Nicole Baumann and Jean-Claude Turpin "Neurochemistry of Stress. An Overview" (2010) 35 Neurochem Res 1875, at 1876.
[10] Harvard Medical School "Understanding the stress response: chronic activation of this survival mechanism impairs health" (18 March 2016) Harvard Health Publishing available at: https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response.
[11] Robert Sapolsky *Why zebras don't get ulcers* (3rd ed) (St Martin's Press, New York, 2004) at 22 [Sapolsky].
[12] Sapolsky, above, at 11.
[13] Harvard Medical School, above n 10.
[14] Harvard Medical School, above n 10.

In the healthy individual, the physiological response systems are rapidly turned on and off, limiting the exposure to the potentially harmful effects of the stress response.[15] However, when the stress response is activated too often or for too long, it starts to have negative consequences. This can "exacerbate existing disease processes, or predispose the individual to acquire new diseases" described as becoming "maladaptive".[16] Long-term effects of an organism's accommodation to certain types of stress is referred to as allostatic load,[17] meaning the "wear and tear" resulting from "chronic overactivity or underactivity of physiological stress response systems."[18]

Stress is not unique to humans, and the human stress response is very like that in other primates.[19] Many papers suggest that there is simply a mismatch between how our bodies evolved to respond to stressors and the present realities of working life filled with performance reviews, KPIs and increasing workloads facilitated by new technologies. Put better by Robert Sapolsky, for other species "the most upsetting things in life are acute physical crises", such as being chased by a lion.[20] These events require "immediate physiological adaptations" if you are going to survive and the body's responses are brilliantly adapted to handling such emergencies.[21] Sapolsky further explains that: [22]

> …we humans live well enough and long enough, and are smart enough, to generate all sorts of stressful events purely in our heads…. Viewed from the perspective of the evolution of the animal kingdom, sustained psychological stress is a recent invention, mostly limited to humans and other social primates. We can experience wildly strong emotions (provoking our bodies into an accompanying uproar) linked to mere thoughts.

*b. Stress and cardiovascular disease*

Cardiovascular diseases are complex and multifactorial, and a full discussion of the medical evidence is beyond the scope of this paper. There is, however, an increasing body of research into the links between stress and the development of cardiovascular diseases and heart attack risk, which are important to be aware of when evaluating the law in this area.[23] As explained well by the Harvard Medical School's public health guidance: [24]

> Chronic low-level stress keeps the HPA [hypothalamic pituitary adrenal]axis activated…Persistent epinephrine [the term used for adrenaline in some countries] surges can damage blood vessels and arteries, increasing blood pressure and raising

[15] Sterling P, Eyer J, Fisher S, et al., eds (1988) Handbook of life stress, cognition and health. (John Wiley, New York), pp 629–649.
[16] E A Mayer "The neurobiology of stress and gastrointestinal disease" (2000) Gut 46 6, 861.
[17] B McEwen "Protective and damaging effects of stress mediators" (1998) N Engl J Med 338 171.
[18] Mayer, above n 18.
[19] Sapolsky, above n 11.
[20] At 4.
[21] At 4.
[22] At 5.
[23] See discussion of evidence in Mika Kivimaki and Ichiro Kawachi "Work stress as a risk factor for cardiovascular disease" (2015) Curr Cardiol Rep 17, 74.
[24] Harvard Medical School, above n 10.

> risk of heart attacks or strokes. Elevated cortisol levels create physiological changes that help to replenish the body's energy stores that are depleted during the stress response. But they inadvertently contribute to the build-up of fat tissue and to weight gain. For example, cortisol increases appetite, so that people will want to eat more to obtain extra energy. It also increases storage of unused nutrients as fat.

Repeated activation of the autonomic nervous system is "characterised by lowered heart rate variability, which has been associated with work stress among men in cross-sectional studies."[25] Low job control has been found to predict coronary disease incidence.[26] Accumulation of work stress is associated with higher risks of the metabolic syndrome, and incident obesity, both linked to cardiovascular disease.[27] Research has shown "[g]reater reports of work stress were associated with a higher risk of cardiovascular disease" and among younger workers "there was a clear dose-response association between greater reports of work stress and higher risks of incident [cardiovascular] events."[28] Greater reports of work stress were also associated with poorer health behaviours in terms of eating less fruit and vegetables and less physical activity.[29] To summarise briefly, the research suggests prolonged stress impacts on the functioning of the heart can trigger heart attacks where there is underlying heart disease, and is also linked to a range of other health behaviors known to exacerbate the risk.

*c. Work stress and depression*

As with cardiovascular disease, increasing rates of depression globally have triggered an increasing volume of international research into the connections between stress and depression.[30] There is also important New Zealand research in this area, including a recent study out of the University of Auckland,[31] and a significant paper resulting from the Dunedin study. [32] This study found work stress was linked to the development of depression (and also generalised anxiety disorder) in young working men and women and the combination of multiple work stressors conferred even higher risks.[33] Holding for those with pre-existing mental health problems they

[25] Tarani Chandola, Annie Britton, Eric Brunner, Harry Hemingway, Marek Malik, Meena Kumari, Ellena Badrick, Mika Kivimaki, and Michael Marmot "Work stress and coronary heart disease: what are the mechanisms?" European Heart Journal (2008) 29, 640–648, at 640. T Vrijkotte, L van Doornen, E de Geus "Effects of work stress on ambulatory blood pressure, heart rate, and heart rate variability" (2000) Hypertension 35 880 and H Hemingway, M Shipley, E Brunner, A Britton, M Malik and M Marmot "Does autonomic function link social position to coronary risk? The Whitehall II study" (2005) Circulation 111 3071.

[26] H Bosma, M Marmot, H Hemingway, A Nicholson, E Brunner, S Stansfeld "Low job control and risk of coronary heart disease in the Whitehall II (prospective cohort) study" (1997) BMJ 314 558.

[27] Tarani Chandola, above n 25.

[28] S Kunz-Ebrecht, C Kirschbaum, A Steptoe "Work stress, socioeconomic status and neuroendocrine activation over the working day" (2004). Soc Sci Med 2004; 58:1523–1530, at 642.

[29] Tarani Chandola and others, above n 25.

[30] See for example, Matias Brødsgaard Grynderup, Ole Mors, Åse Marie Hansen, Johan Hviid Andersen, Jens Peter Bonde, Anette Kærgaard, Linda Kærlev, Sigurd Mikkelsen, Reiner Rugulies, Jane Frølund Thomsen and Henrik Albert Kolstad "A two-year follow-up study of risk of depression according to work-unit measures of psychological demands and decision latitude" (2012) Scandinavian Journal of Work, Environment & Health 38, 6, 527.

[31] Markus Rantala, Severi Luoto, Indrikis Krams and Hasse Karlsson "Depression subtyping based on evolutionary psychiatry: Proximate mechanisms and ultimate functions" (2017) Brain Behav. Immun (in press).

[32] Maria Melchior, Avshalom Caspi, Barry Milne, Andrea Danese, Richie Poulton and Terriee Moffitt "Work stress precipitates depression and anxiety in young, working men and women" (2007) Psych Med 37, 1119.

[33] Ibid.

found "work stress precipitates the occurrence of psychiatric disorder in previously healthy individuals."[34] The precise causal mechanisms involved are complex and not completely understood, but the prevailing thinking is some combination of the direct neurotoxic effects of cortisol on the brain, down-regulation of the glucocorticoid receptor, which impairs affect regulation, an increase in pro-inflammatory cytokine levels and the leaking of non-pathogenic commensal bacteria from the gut in to peripheral circulation.[35] To summarise, prolonged stress results in biological changes to the functioning of the brain that can cause or trigger depression, and make it more difficult to recover from it. The research also highlights that cardiovascular disease and depression frequently co-occur and depression is a strong predictor of cardiovascular disease onset, cardiac events, and death from cardiovascular disease.[36]

*d. Complexity in causal connection*

Despite the significant evidence of the causal connection between work stress and illnesses, such as depression and cardiovascular disease, the causality is far from simple or direct. The physical and psychological interaction of the worker's body with their working environment is likely to be a complex combination, influenced by genetics, early development and prior stress exposure, outside work stressors, other health conditions and support available.[37] There are also differences in "stress reactivity."[38] "[T]here is wide acknowledgment that both the genome and early experiences account for some share of the variance in phenotypic stress responses."[39] Those people whose genes predispose them to greater biological effects of stress are referred to as people with highly reactive phenotypes. A significant piece of research into highly reactive phenotypes by

[34] Above, at 1126.
[35] See Markus Rantala, above n 31.
[36] Diana Chirinos and Neil Schneiderma "Depression and Cardiovascular Disease in Women: Behavioral and Biological Mechanisms Involved in this Association" in Kristina Orth-Gomer, Neil Schneiderman, Viola Vaccarino and Hans-Christian Deter (eds) *Psychosocial stress and cardiovascular disease in women* (Springer International, Switzerland, 2015).
[37] See, for example, T Eley, R Plomin "Genetic analysis of emotionality" (1997) Curr Opin Neurobiol 7:279. E Mayer, C Saper, C Ladd, R Huot, K Thrivikraman "Long-term behavioural and neuroendocrine adaptations to adverse early experience" in *The biological basis for mind body interactions*, vol. 7, 122 (Elsevier, Amsterdam, 2000).
[38] Reactivity has been defined in the scientific literature as "the deviation of a physiological response parameter from a comparator or control value that results from an individual's response to a discrete, environmental stimulus." See K Matthews "Summary, conclusions and implications" in K Mathews, S Weiss and T Detre (eds) *Handbook of stress, reactivity and cardiovascular disease*, (New York, Wiley Interscience,1986). J Cacioppo, G Berntson, W Malarkey, J Kiecolt-Glaser, J Sheridan, K Poehlmann, M Burleson, J Ernst, L Hawley and R Glaser "Autonomic, neuroendocrine, and immune responses to psychological stress: The reactivity hypothesis" (1998) 840 Annals of the New York Academy of Sciences 664; A Alkon, L Goldstien, N Smider, M Essex, D Kupfer and W Boyce "Developmental and contextual influences on autonomic reactivity in young children" (2003) 42 Developmental Psychobiology 64; M Allen and K Matthews "Hemodynamic responses to laboratory stressors in children and adolescents: The influence of ages, race and gender" (1997) 34 Psychophysiology 730; M Meaney "Maternal care, gene expression and the transmission of individual differences in stress reactivity across generations."(2001) 24 Annual Review of Neuroscience 1162; See also S Suomi "Individual differences in rhesus monkey behavioural and adrenocortical responses to social challenge: Correlations with measures of heart rate variability" (1987) referred to in Thomas Boyce and Bruce Ellis "Biological sensitivity to context: I An evolutionary-developmental theory of the origins and functions of stress reactivity" (2005) 17 Development and Psychology 271.
[39] Thomas Boyce and Bruce Ellis, above, at 275.

Boyce and Ellis, in 2005, is changing the way the interaction of genetic susceptibility and the causal contribution of the workplace is viewed.[40] Boyce and Ellis suggest:[41]

> Rather than acting as a unidirectional risk factor for poor health outcomes…high-stress reactivity has been shown repeatedly to operate in a bivalent manner, most often escalating the risk of maladaptive outcomes in high-stress contexts, but diminishing such risk and acting protectively under supportive, low-stress conditions.

What this potentially means is that for those people genetically more susceptible, it may be more likely that their exposure to the current stressful environment is responsible for their particular health problems. This paper does not aim to present the evidence for the relationship of causation, but rather only highlight that there is a significant gap between medical thinking and the drafting of the law.

## III. New Zealand's Current Legal Response

New Zealand's legal response to work-stress-related depression and cardiovascular disease is contained in the operation and interaction of the ACA, the HSWA, the sick leave provisions under the HA and the wider employment relations regime, particularly personal grievances. Each of these areas is discussed below with current gaps highlighted.

*e. Current ACC cover for "cardiovascular episodes"*

In other countries, work-stress-related depression and cardiovascular diseases receive compensation under their relevant workers' compensation regimes. The New Zealand ACC scheme provides no, or very little cover to either condition, even where shown to be caused by work. Stress-related health conditions fall outside the definition of "accident" in section 25, the cover of "gradual process, disease or infections" under section 30, and the Schedule of Occupational Diseases. Section 30(5)(a) expressly excludes any work-related health conditions caused by "non-physical stress." The exclusion of stress-related cardiovascular conditions from ACC has been recently confirmed in *MacFarlane v ACC*[42] in 2014 and further in 2016 in *Carter v ACC.*[43]

ACC cover for cardiovascular disease is limited to the circumstances described in section 28(3) of the ACA. Cover is only available "if the [cardiovascular] episode is caused by physical effort or physical strain in performing … employment that is abnormal in application or excessive in intensity for the person."[44] Essentially, cover is only available where the heart attack is "caused by" some unusual physical exertion on the part of a worker in performing an unusually physical task in their ordinarily sedentary work. For example, in *Estate of Wei v ACC*[45], Wei died of a fatal

[40] Ibid.
[41] At 283.
[42] *MacFarlane v ACC* [2014] NZACC 141.
[43] *Carter v ACC* [2016] NZHC 1140.
[44] ACA, s28 (3).
[45] *Estate of Wei v ACC* [2004] NZACC 338.

heart attack after being assaulted by a group of youths while working in his electronics shop. Although the judge considered the "physical effort in the struggle during the assault" may meet the requirements, this could not be said to have "caused" the cardiovascular episode, meaning Wei's estate could not obtain compensation.[46] The medical evidence revealed underlying asymptomatic heart disease. The court recognised that the additional physiological stress may have triggered the heart attack but this did not amount to cause. It also acknowledged that had the assault not occurred the heart attack may have been prevented with medical intervention. Although stress was a factor here, the judge held that "physiological stress" did not meet the definition of "physical stress."[47]

What this case highlights is the change in medical thinking that has occurred since the original inclusion of the cover provisions. Heart attacks were, in the early part of the 20th century, considered by policy makers to be caused by physical exertion, essentially, the heart gave out through overwork.[48] Just like a muscle could tear from too much force being exerted, so too, a heart was thought to be injured by excessive force, and so it was thought of as an "accident". Nowadays, heart attacks are viewed as acute events caused by a blockage in blood vessels to the heart in cases of cardiovascular disease.[49] It would be extremely unlikely for a worker to have a heart attack in the circumstances set out in section 28(3) without pre-existing heart disease or a pre-existing structural defect, meaning the section, as drafted, offers little assistance to workers in the contemporary workplace. As in the case of *Wei*, the physical exertion would, at best, be considered to operate as a trigger to an inevitable event, and would not likely, on review of the medical evidence, be considered "the cause."

### *f. Current ACC cover for depression*

Work-stress-related depression is usually also excluded from ACC cover under section 30(5)(a). In 2008, section 21B was added to the ACA to provide cover to mental health problems arising in a narrow range of circumstances that involve exposure to traumatic incidents. Section 21B provides cover where "mental injury is caused by a single event" in particular circumstances.[50] A person is required to experience the event directly and the event is required to be "an event that could reasonably be expected to cause mental injury to people generally."[51] A person "experiences, sees, or hears an event directly" if they are involved in or witnesses the event, and are "in close physical proximity to the event at the time it occurs."[52] This section was inserted following lobbying by transport unions that had members affected by transport accidents involving pedestrians or suicidal people.

[46] At [13].
[47] At [13].
[48] See discussion on changing thinking in the time in Mel Bartley "Coronary Heart Disease – A Disease of Affluence or A Disease of Industry?" in Paul Weindling (ed) *The Social History of Occupational Health* (Croom Helm, Kent, 1985). See also the discussion in Commonwealth of Australia *Work-Related Cardiovascular Disease Australia* (April 2006).
[49] Ibid.
[50] Accident Compensation Act 2001, s21B(1)(b) [ACA].
[51] Section 21B(2)(b).
[52] Section 21B(5)(a) and (b).

Section 21B excludes all but a very narrow range of cases. For example, in *KB v ACC*[53], the case involved a claim made by a police officer attending a particularly distressing suicide, and having to counsel the family which she alleged caused her condition. The court found that "the appellant has experienced a significant number of events in the course of her work"[54] and an event meeting the requirements of section 21B "must be one that is in effect a one-off event, and which results in the more or less immediate onset of the factors involved in the medical condition of Post-Traumatic Stress Disorder."[55] In *OCS Ltd v TW*,[56] a claim was made for a mental health problem resulting from a pattern of bullying and harassment which culminated in an incident of minor assault. The court decided that "minor incidents" were outside the mischief that section 21B was introduced to remedy, and the incident complained of had to be sudden.[57] However, in the 2016 case of *MC v ACC*,[58] the claimant suffered a series of traumatic events in the course of employment as a police officer, and in active combat in Afghanistan. The judge in this case took a wider view of the single incident requirements and it remains to be seen what, if any, impact this case may have on the interpretation of the section. Even if the decision in *MC v ACC* does widen the approach taken to section 21B, it is still a very narrow category of cover, leaving the vast majority of work-stress-related mental illnesses outside the scope of ACC.

*g. The consequences of exclusion from ACC cover*

Where employees suffering these conditions are excluded from cover under ACC, they may have entitlements to sick leave under contract and could pursue legal action, most typically through the personal grievance for unjustifiable disadvantage, discussed further below. If, as will be the case for most workers, they do not have additional sick leave, or a successful legal claim, they have only private insurance, or the benefit system to fall back on. In 2013, research was conducted into the socioeconomic impact of the difference in financial support between ACC and Work and Income New Zealand (WINZ) on a group of people of a similar age and level of functional impairment.[59] The study concluded that those in the illness group (not covered by ACC) had "considerably poorer socio-economic outcomes," did not return to work as early, and were the "most vulnerable for decline into poverty and ill health."[60]

Another important consequence of exclusion is a lack of statistical information on work-stress-related depression and cardiovascular disease. In New Zealand, work-related injury and illnesses statistics come primarily from ACC administrative data, meaning that, because there is no cover for these conditions, there is also no resulting data on these conditions. This makes it very difficult to evaluate the size of the problem, the costs of the problem or how best to respond to it. The lack of data has a flow on effect on health and safety, making it difficult to isolate industries in greatest need of intervention, the types of hazards most commonly associated with the development of these conditions and other factors that impact on the prevalence of work-stress-related illness.

[53] *KB v ACC* [2013] NZACC 41.
[54] At [24].
[55] At [25].
[56] *OCS Ltd v TW* [2013] NZACC 177.
[57] At [83].
[58] *MC v ACC* [2016] NZACC 264.
[59] Sue McAllister and others "Do different types of financial support after illness or injury affect socio-economic outcomes? A natural experiment in New Zealand" (2013) 85 SSAM.
[60] At 100.

*h. Other avenues for compensation: personal grievances*

If excluded from ACC cover, employees can take a personal grievance where their work-related depression or cardiovascular disease results from some unjustifiable disadvantage. There may also be negligence, breach of statutory duty or breach of implied term claims that can be made. Perhaps most well-known of these cases is the Court of Appeal decision in *AG v Gilbert*.[61] Mr Gilbert suffered work-stress-related depression and a heart condition as a result of stressful employment as a parole officer at the Department of Corrections. The court found his health conditions were caused by work overload and management failure, "not just from stress necessarily inherent in his work, but from avoidable additional pressure of workload, office dysfunction, and inadequate resources."[62] The Court of Appeal concluded that the employer owed Mr Gilbert a contractual duty to comply with the health and safety legislation as well as the terms of the contract providing him with a safe working environment. It also concluded that this amounted to a personal grievance. This case has been relied on in a number of other cases relating to workplace stress, such as *Crutchley v MSD,*[63] *Clear v Waikato District Health Board*[64] and *Rosenberg v Air New Zealand Ltd.*[65]

There are significant hurdles for workers in taking these cases, and, even where successful, outcomes are generally less favourable when compared to ACC cover. A personal grievance requires an employee to sue their employer and prove fault, which the Court of Appeal has described as posing "formidable obstacles."[66] It can be difficult and expensive to prove the required causal connection, given the timeframes and complexity of factors leading to the development of chronic diseases. There are also the additional financial and emotional burdens of bringing a legal case, which may be a particular deterrent for a person suffering a work-stress-related heart condition or depression. The employee's personal grievance remedies are usually limited to the remedies of reimbursement of lost wages, or a wrongly denied sick leave entitlement, and compensation for "humiliation, loss of dignity, and injury to the feelings" under section 123(1)(c)(i) of the ERA. Most of these cases are likely resolved through the Employment Relations Mediation Service, with sums recorded in confidential settlements, making it difficult to fully evaluate the impact of this option on worker outcomes. Generally, however, the sums agreed to in such cases are relatively small and unlikely to be equivalent to the ongoing weekly compensation and treatment costs, rehabilitation and return to work support available under the ACC scheme.

*i. Other avenues for compensation: sick leave*

Employees with stress-related illnesses may be able to access sick leave under section 63 of the HA, or a contractual entitlement with their employer. It is unclear whether or, to what extent, stress-related depression and cardiovascular disease impacts on sick leave use or associated cost, given the lack of data. It seems likely, however, there is some effect, especially where there is additional contractual provision for accrual and use. The 2017 *Wellness in the Workplace Report*, which is a survey of New Zealand businesses and their employees, conducted by Business New

[61] *A-G v Gilbert* [2002] 2 NZLR 342.
[62] At [8].
[63] *Crutchley v MSD* [2008] NZERA 196.
[64] *Clear v Waikato District Health Board* [2007] NZERA 33.
[65] and *Rosenberg v Air New Zealand Ltd* [2009] NZERA 556.
[66] *A-G v Gilbert* [2002] 2 NZLR 342, at para [87].

Zealand and Southern Cross Health Insurance, provides the most recent information on sick leave.[67] It found that "stress was up 22.9% across businesses" over the past two surveys, and "46% of kiwis still turn up to work when sick."[68] There is little explanation as to why almost half of New Zealand employees turn up to work despite having a paid entitlement to leave, although it seems likely to involve a number of factors, such as staffing levels, workload, deadlines or targets, the structure of responsibility for particular projects, fear of retaliation or being seen as disloyal. It also raises questions about the suitability of New Zealand's sick leave laws for the present reality of work.

The HA provides that "an employee is entitled to 5 days' sick leave for each of the 12-month periods specified in section 66(2)" and "an employee may carry over up to 15 days' sick leave to a maximum of 20 days current entitlement in any year." The current rules for sick leave relate to the circumstances in which employees may take sick leave and sufficient evidence of sickness, on the presumption that employees will, whenever possible want to use their sick leave entitlement, even when not genuinely sick.[69] There is no explicit legal requirement to ensure that employees can actually use their accrued sick days (although this could fit within broader duties of good faith or reasonableness) and no obligation to ensure work can be covered, or to ensure staffing levels are appropriate, although there may be such provisions in workplace policies and collective employment agreements.

In addition to the lack of minimum regulation, there is almost no regulator guidance on the role of sick leave in achieving worker health goals, or management of workers with depression or cardiovascular disease. The Ministry of Business, Innovation and Employment (MBIE) guidance is limited to a description of the minimum accrual and evidence requirements. WorkSafe NZ offers no advice on sick leave and worker health either, despite its issue of *Healthy Work: WorkSafe's Strategic Plan for Work-Related Health 2016 to 2026*[70], prioritising the importance of occupational health. There is no guidance on practices or policies that might be appropriate or evaluation tools provided to employers. There is also no guidance on the potential role of health and safety representatives and committees in relation to stress-related illnesses, or on the monitoring of sick leave use as an early indicator of poor workplace health.

As mentioned above, employment agreements, particularly collective agreements can and do provide for additional wellness policies and sick leave entitlements, including for long-term use. Where these additional provisions do occur, they are often tested in situations of stress-related illness, such as where an employee suffers from depression or some incapacity due to cardiovascular disease. Policies typically tend to be discretionary and exercises of discretion may become the subject of a personal grievance as illustrated in the cases of *X v Bay of Plenty DHB,*[71] *Lankes v CDHB,*[72] *and Leota v CE of MSD.*[73]

[67] Business New Zealand and Southern Cross Health Insurance *Wellness in the Workplace Report 2017*, available at: https://www.businessnz.org.nz/__data/assets/pdf_file/0009/128547/Wellness-in-the-Workplace-Survey-2017.pdf
[68] At 6.
[69] Holidays Act 2003, ss65 and 68. [HA].
[70] WorkSafe New Zealand *Healthy Work: WorkSafe's Strategic Plan for Work-Related Health 2016 to 2026* (Wellington, WorkSafeNZ, 2016).
[71] *X v Bay of Plenty DHB* [2009] NZERA 501 (Auckland).
[72] *Lankes v CDHB* [2016] NZERA 162 (Christchurch).
[73] *Leota v CE of MSD* [2016] NZEmpC 142.

*j. The HSWA and work-stress-related depression and cardiovascular disease*

The HSWA was introduced in response to New Zealand's health and safety failings, highlighted in the *Report of the Royal Commission on the Pike River Mine Trage*dy[74] and the *Report of the Independent Taskforce on Workplace Health and Safety*.[75] The HSWA states that it is based on "the principle that workers and other persons should be given the highest level of protection against harm to their health, safety, and welfare from hazards and risks arising from work."[76] Section 36 establishes the primary legal duty that a PCBU[77] "must ensure, so far as is reasonably practicable, the health and safety of workers who work for the PCBU, while the workers are at work in the business or undertaking."

The objects of the HSWA and the drafting of section 36 are clearly wide enough to encompass work-related stress, however, the machinery sitting beneath those primary duties fails to provide much practical assistance. The problems are not in the general duties, (although section 36(3) could do with an additional subparagraph, as discussed in other papers[78]) but rather in the lack of enforcement machinery and regulations sitting beneath those duties. Australian research highlights that, even when psychosocial hazards are expressly included within the primary duties of the legislation, they remain "a marginal area of inspectorate activity."[79] Psychosocial hazards "are commonly invisible to traditional methods of workplace inspections,"[80] they are also more complex, time-consuming and resource intensive to investigate.[81]

*k. No suitable inspection or enforcement tools*

The assumption in the HSWA, as in the previous legislation, is that the inspection and enforcement tools designed for the physical hazards of 20th century mines, factories and workshops are perfectly suitable for the types of hazards that give rise to stress-related health problems. Despite recent reforms, Worksafe NZ still does not have the legislative tools (or the regulatory standards) needed to be able to properly address the problem of stress-related illnesses.[82] There has been a marked absence of prosecution or public enforcement action since the express inclusion of work-stress within the definition of hazard in 2003.[83] The position of WorkSafe NZ seems to be encouraging workers to address these issues through personal grievances.[84] Just as personal grievances are not

[74] Royal Commission on the Pike River Coal Mine Tragedy *Report of the Royal Commission on the Pike River Coal Mine Tragedy* (October 2012).
[75] Independent Taskforce on Workplace Health and Safety *The Report of the Independent Taskforce on Workplace Health and Safety: He Korowai Whakaruruhau* (April 2013).
[76] Health and Safety at Work Act 2015, s 3 [HSWA].
[77] PCBU is a person conducting a business or undertaking, defined in s 17, and is wider than employer.
[78] See Dawn Duncan "Addressing the chronic health effects of work: A model for regulatory standards and enforcement," delivered to the 2016 Australian Labour Law Association conference and in preparation for publication.
[79] Richard Johnstone, Michael Quinlan and Maria McNamara "OHS inspectors and psychosocial risk factors: Evidence from Australia (2011) 49 Safety Science 547.
[80] At 548.
[81] At 550-551.
[82] See Dawn Duncan "Addressing the chronic health effects of work: A model for regulatory standards and enforcement," delivered to the 2016 Australian Labour Law Association conference and in preparation for publication.
[83] *Department of Labour v Nalder & Biddle (Nelson) Ltd.* [2005] NZHSE 20.
[84] See the most recent statement in WorkSafe New Zealand *Bullying at Work: Advice for Workers* (WorkSafe NZ, 2017) available at: http://www.worksafe.govt.nz/the-toolshed/tools/bullying-prevention-toolbox/#page=15 (accessed 14 November 2017). Additionally, Worksafe's prosecution priorities can be found here:

the optimal way to ensure workers harmed at work have fair and accessible compensation, so too, they are not the optimal way to enforce the country's health and safety laws.

Resolving cases of work-stress-related depression or cardiovascular disease through confidential mediated settlement offers little prospect of achieving meaningful change to working conditions that cause stress-related illnesses. There is little incentive for employers to take action, as there is little prospect of penalties for employers failing to meet their obligations under the HSWA, and a free mediation process to quietly resolve any issues that do arise at an individual level. As WorkSafe NZ is eager to point out,[85] there are business reasons for wanting to ensure the health and productivity of the workforce, however, for a number of employers, it is simply cheaper to exit package any affected workers than address excessive workloads or unhealthy (albeit profitable) business practices.

## IV. Reforms Needed to Address Work-Stress-Related Depression and Cardiovascular Disease

The work being performed in New Zealand, and the medical thinking on the health effects of that work has changed a great deal since Woodhouse and Robens were writing their reports in the late 1960s. While the science is complex and not yet perfectly understood, the development of work-related depression or cardiovascular disease will likely have a genetic, early life and outside of work component. That poses a challenge for laws designed for accidental injuries that typically have simple and direct causal connections, e.g. getting crushed in a mine collapse or being de-gloved by unguarded machinery. New Zealand law-makers have tended to respond to the challenges of complex causation with a mix of nervous ad hoc tinkering, obfuscation, avoidance, fear of floodgates arguments and cost-saving claims. If the law in these areas is to serve the working people of New Zealand, it needs to be designed to respond to complexity and, as argued further below, the best way to do that is to start with clear policy principles. New Zealand's laws need to be designed, first and foremost, for the promotion of worker health.

### *a. ACC reform: The legacy of the past and the complexity of the future*

The area in most urgent need of reform is the cover provisions of the ACC scheme. Although the lack of data makes it difficult to know how many workers are affected, looking at trends internationally, there are potentially significant numbers of people without access to compensation, treatment or support for their work-related conditions and the costs for those workers, business and wider society is considerable. Reform to the ACC scheme faces two key challenges, overcoming the legacy of the past, and responding to increasingly complexity in the relationships between workers and their working environments in future.

One of the key problems in the current ACA is the lack of definable policy principle as to where the boundary lines of cover ought to be drawn. As set out in other papers, confining the ACC scheme to cover 'accidents' was a political compromise needed to ensure the success of the

https://worksafe.govt.nz/laws-and-regulations/operational-policy-framework/operational-policies/prosecution-policy/

[85] WorkSafe New Zealand *Work-Related Stress* (17 March 2017) at: http://www.worksafe.govt.nz/worksafe/hswa/health-safety/topics/stress

proposal at the time.[86] This, however, created an inherent rationing problem with a particularly detrimental effect on the cover of chronic health problems in the years that followed.[87] The ACC scheme covers some, but not all, work-related health problems, with no clear basis in principle for why particular conditions are excluded. In countries with workers' compensation regimes, the tests for cover revolve around two questions, first, whether the claimant is a 'worker' as defined, and second, whether their condition sufficiently related to work. These schemes do not break down cover by diagnostic category and, as a result, these schemes are generally better able to respond to changes, both in work and medical thinking, than ACC. These schemes have generally also been better able to provide for workers with work-stress-related depression and cardiovascular disease.

Responding to future complexity is the second challenge, but this, too, could be assisted with the inclusion of a clear set of policy principles for the boundary lines of cover. The tests of cover need to be reformulated to ask not 'what is the causal relationship between work and this given diagnosis?' but the more nuanced, 'what, given, the explicit policy goals of this section, ought to be treated as sufficient causal connection between this person's work and their health condition?' The causal tests for the cover of work-related health problems need to be paired with a clear legislative statement of policy purpose and a process for decision-making and review that allows for those purposes to be foremost in decisions of cover.

The cover provisions of the ACC scheme need to be directed towards the goals of fair and equitable compensation, recognising the legal rights of workers to compensation, improving worker health and also improving the health and safety in New Zealand's workplaces. Redrafting the ACA provisions relating to worker health with a clearer statement of purpose and principle may offer a solution to an increasingly complex and rapidly moving scientific understanding of the relationship between human beings and their working environments.

*b. Reforms to the HSWA: More suitable regulations and enforcement tools needed*

The HSWA also needs to be able to better respond to complexity in the causal relationships between workers' health and their working environments. WorkSafe NZ needs a set of enforcement tools designed for inspection and enforcement in situations of stress-related depression and cardiovascular disease. As mentioned in other papers,[88] one response to this problem may be a much simpler review process, paired with an evaluation tool (ideally included in healthy work focused regulations). This, coupled with a more explicit set of employee rights, and a role for the regulator in evaluating the reasonableness of the employer's actions could provide a simple and practical solution to the current problem of attempting to apply traditional 'inspection' techniques to complex jobs.

[86] See Dawn Duncan "ACC and workers' health: Compensation, compromises and consequences" in Gordon Anderson, Alan Geare, Erling Rasmussen and Margaret Wilson (eds) *Transforming Workplace Relations in new Zealand 1976-2016* (Wellington, VUP, 2017).
[87] Ibid.
[88] See Dawn Duncan "Addressing the chronic health effects of work: A model for regulatory standards and enforcement" presented to the Australian Labour Law Association conference in 2016 and in preparation for publication.

*c. Coordinated laws directed toward the goals of improved employee health*

As set out above, the ACA and HSWA are currently supplemented by the sick leave provisions in the HA and the personal grievances regime. Reforms to the ACA and HSWA need to be viewed in a wider employment relations context. For example, it may be time to draft rules or issue guidance on the management of sick leave beyond simply accruals, the calculation of pay, or the requirements for medical certificates. Sick leave may need to be considered as part of workplace health and safety, with specific roles for health and safety representatives and committees in monitoring employee health and in workplace health advocacy.

The new Labour-led Government campaigned on a policy of introducing Fair Pay Agreements. It is unclear yet what these will look like, but the Party's website defines these as follows.[89]

> Fair Pay Agreements (FPAs) will be agreed by businesses within an industry and the unions representing workers within that industry. FPAs will set basic standards for pay and other employment conditions within an industry, according to factors including job type and experience.

These agreements have the potential to create more tailored worker health standards or specific process requirements. It is essential that worker health, and in particular, work-stress-related depression and cardiovascular disease form part of the discussion about the reforms needed to New Zealand's labour laws.

## V. Conclusion: The Role of Labour Law in Addressing the Problems

Work-stress-related depression and cardiovascular disease are significant problems for New Zealand workers, businesses and wider society. This paper has looked at New Zealand's current legal response to work-stress-related depression and cardiovascular disease, primarily in the ACA and HSWA. Obviously, stress is not confined to the hazards of the workplace and labour law has a wider role to play in ensuring the health of working people. Labour law has a significant impact on employment security, the manner by which people are engaged to perform work, the bargaining power of workers in setting terms and conditions, wage rates, and, consequently, the access of workers to secure housing and healthcare. These factors impact not only on the stress levels of workers but their ability to respond to them. Fully addressing the problems of worker depression and cardiovascular disease requires a wider response, tackling precarious and insecure work, low wages and the social consequences of economic deprivation. While this wider role is acknowledged, this paper argues that significant improvements that could be made in this area with simple reforms to the coverage of the ACC scheme (including better data collection), and a better suited set of enforcement tools and regulatory standards under the HSWA. These reforms would offer immediate and practical benefit to workers, while also equipping law makers with the data needed to formulate longer-term strategy.

[89] New Zealand Labour Party, Workplace Relations Policies (2017) available at: http://www.labour.org.nz/workplacerelations